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IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Declaration and Power of Attorney

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled "A SEMICONDUCTOR DEVICE HAVAING A DOPED LATTICE MATCHING LAYER AND A METHOD OF MANUFACTURE THEREFOR," the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment, if any, specifically referred to in this oath or declaration.

I acknowledge the duty to disclose to all information known to me which is material to the patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

<u>NUMBER</u>	<u>COUNTRY</u>	<u>DATE FILED</u>	<u>PRIORITY CLAIMED</u>
	None		

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

<u>US/PCT Serial Num</u>	<u>Date Filed</u>	<u>Status</u>
None		

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorney(s) with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith:

Lester H. Birnbaum	(Reg. No. 25,830)
Richard J. Botos	(Reg. No. 32,016)
Gerard A. deBlasi	(Reg. No. 34,149)
Anthony Grillo	(Reg. No. 36,535)
Mark A. Kurisko	(Reg. No. 38,944)
Robert P. Marley	(Reg. No. 32,914)
Scott W. McLellan	(Reg. No. 30,776)
Geraldine Monteleone	(Reg. No. 40,097)
Scott J. Rittman	(Reg. No. 39,010)
Ferdinand M. Romano	(Reg. No. 32,752)
David L. Smith	(Reg. No. 30,592)
John P. Veschi	(Reg. No. 39,058)

I hereby appoint the attorney(s) on ATTACHMENT A as associate attorney(s) in the aforementioned application, with full power solely to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected with the prosecution of said application. No other powers are granted to such associate attorney(s) and such associate attorney(s) are specifically denied any power of substitution or revocation.

Full name of first inventor: Wen Lin

Inventor's signature: Wen Lin Date: Oct. 12, 2001

Residence: City of Allentown
County of Lehigh
State of Pennsylvania

Citizenship: United States of America

Post Office Address: 4445 Kohler Drive
Allentown, Pennsylvania 18103

Full name of second inventor: Charles W. Pearce

Inventor's signature: Charles W. Pearce Date: October 16, 2001

Residence: City of Emmaus
County of Lehigh
State of Pennsylvania

Citizenship: United States of America

Post Office Address: 410 South 12th Street
Emmaus, Pennsylvania 18049

ATTACHMENT A

Attorney Name(s):

David H. Hitt	Registration No. 33,182
Charles W. Gaines	Registration No. 36,804
Glenn W. Boisbrun	Registration No. 39,615
Mark E. Kelley	Registration No. 45,857
Greg H. Parker	Registration No. 44,995
Jimmy L. Heisz	Registration No. 38,914
J. Joel Justiss	Registration No. 48,981

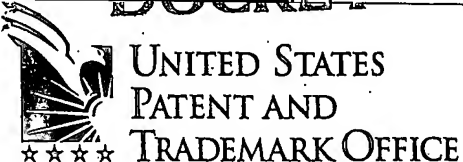
Telephone calls should be made to Greg H. Parker of HITT GAINES & BOISBRUN, P.C.
at:

Phone No.: (972) 480-8800
Fax No.: (972) 480-8865

All written communications are to be addressed to:

Greg H. Parker
HITT GAINES & BOISBRUN, P.C.
P.O. Box 832570
Richardson, Texas 75083

Atty. Docket No.: LIN 11-34



FEB 11 2002

FEBRUARY 04, 2002

PTAS

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

HITT GAINES & BOISBRUN, P.C.
GREG H. PARKER
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RICHARDSON, TX 75083



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RECORDATION DATE: 10/24/2001

REEL/FRAME: 012358/0163
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

LIN, WEN

DOC DATE: 10/12/2001

ASSIGNOR:

PEARCE, CHARLES W.

DOC DATE: 10/16/2001

ASSIGNEE:

AGERE SYSTEMS INC.
555 UNION BOULEVARD
A CORPORATION OF DELAWARE
ALLENTOWN, PENNSYLVANIA 18109

SERIAL NUMBER: 10003873
PATENT NUMBER:

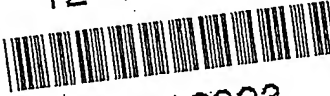
FILING DATE: 10/24/2001
ISSUE DATE:

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U.S. PTO
10/003873
10/24/01

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached
Execution Date
Month Day Year
10 12 2001

Name (line 1) Wen Lin

Name (line 2)

Second Party

Name (line 1) Charles W. Pearce

Execution Date
Month Day Year
10 16 2001

Name (line 2)

Receiving Party

☐ Mark if additional names of receiving parties attached

Name (line 1) Agere Systems Inc.

Name (line 2) a Corporation of Delaware

Address (line 1) 555 Union Boulevard

Address (line 2)

Address (line 3) Allentown

Pennsylvania

18109

City

State/Country

Zip Code

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Correspondent Name and Address

Area Code and Telephone Number (972) 480-8800

Name Greg H. Parker

Address (line 1) Hitt Gaines & Boisbrun, P.C.

Address (line 2) P.O. Box 832570

Address (line 3) Richardson, Texas 75083

Address (line 4)

Pages

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Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

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Patent Application Number(s)

N/A

Patent Number(s)

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year
10 12 2001

Patent Cooperation Treaty (PCT)

Enter PCT application number

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only if a U.S. Application Number has not been assigned.

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Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00

Method of Payment:

Deposit Account

Enclosed ☐

Deposit Account ☒

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

501735

Authorization to charge additional fees:

Yes

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No

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Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Charles W. Gaines

Name of Person Signing

Signature

10/24/2001

Date

ASSIGNMENT

For value received, we, Wen Lin, of Allentown in the County of Lehigh and the State of Pennsylvania, and Charles W. Pearce, of Emmaus in the County of Lehigh and the State of Pennsylvania, hereby sell, assign and transfer to Agere Systems Inc., a corporation of the State of Delaware, having an office at 555 Union Boulevard, Allentown, Pennsylvania 18109, U.S.A., and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to "A SEMICONDUCTOR DEVICE HAVING A DOPED LATTICE MATCHING LAYER AND A METHOD OF MANUFACTURE THEREFOR" described in an application for Letters Patent of the United States, executed by us of even date herewith, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Agere Systems Inc. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Agere Systems Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Agere Systems Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Agere Systems Inc. in the United States and in all countries foreign to the United States, or to such nominees as Agere Systems Inc. may designate.

We agree that, when requested, we shall, without charge to Agere Systems Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Wen Lin
Wen Lin 10/12/01

STATE OF Pennsylvania
COUNTY OF Lehigh

§
§
§

On this 12th day of October, 2001, before me personally came Wen Lin, to me known to be the individual described herein and who executed the foregoing instrument, and acknowledged execution of the same.

Janet M. Garger
Notary Public

My Commission Expires:

12/28/04

Notarial Seal
Janet M. Garger, Notary Public
Allentown, Lehigh County
My Commission Expires Dec. 28, 2004
Member, Pennsylvania Association of Notaries

Charles W. Pearce
Charles W. Pearce

STATE OF Pennsylvania
COUNTY OF Lehigh

§
§
§

On this 16 day of October, 2001, before me personally came Charles W. Pearce, to me known to be the individual described herein and who executed the foregoing instrument, and acknowledged execution of the same.

Mary Ellen Dobish
Notary Public

My Commission Expires:

11/6/04

Notarial Seal
Mary Ellen Dobish, Notary Public
Allentown, Lehigh County
My Commission Expires Nov. 6, 2004
Member, Pennsylvania Association of Notaries

Agere Systems Inc.
555 Union Boulevard
Allentown, Pennsylvania 18109